DOCUMENT RESUME

ED 340 641 SO 021 680

AUTHOR Brown, B. Bradford; Steinberg, Laurence
TITLE Noninstructional Influences on Adolescent Engagement and Achievement. Final Report: Project 2.
INSTITUTION National Center on Effective Secondary Schools, Madison, WI.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Feb 91
CONTRACT G008690007
NOTE 10p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; Adolescents; Educational Research; *Extracurricular Activities; High Schools; *Parent Influence; Parent Student Relationship; *Peer Influence; *Secondary School Students; *Student Employment

ABSTRACT

The impact of four influences--family, peers, part-time employment, and school-sponsored extracurricular activities--on the achievement patterns of high school students is examined in this research study. The main purpose of the study was to identify the specific processes in each of the four areas by which students' academic engagement and school performance are increased or diminished. The processes focus on such questions as how different parenting strategies affected engagement and achievement and whether extracurricular participants were affected by the degree to which coaches or advisors emphasized academic achievement. A self-reporting survey questionnaire was developed and administered to high school students in three Wisconsin high schools and six in the San Francisco Bay (California) area. Among the main findings were that, in general, parents' actions had more impact on student achievement levels than their values or expectations. As for peer influences, most students reported that their friends encouraged achievement--at least to a moderate degree. The degree to which peers endorsed school achievement varied greatly in relation to which peer groups, or "crowd," the students belonged. It also was found that, in general, part-time employment distracted students from achievement, while extracurricular activities enhanced their school performance. Implications of the findings for parents and schools are discussed, as are the implications for future research. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

PS

NATIONAL CENTER ON EFFECTIVE SECONDARY SCHOOLS

University of Wisconsin–Madison
Wisconsin Center for Education Research
1025 W. Johnson St.
Madison, WI 53706
(608) 263-7575

ED340641

Final Deliverable.

FINAL REPORT:

PROJECT 2. NONINSTRUCTIONAL INFLUENCES ON ADOLESCENT ENGAGEMENT AND ACHIEVEMENT

Principal Investigators: B. Bradford Brown and Laurence Steinberg

February 1991

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SO 021 680

This paper was prepared at the National Center on Effective Secondary Schools, supported by the U.S. Department of Education, Office of Educational Research and Improvement (Grant No. G-008690007) and by the Wisconsin Center for Education Research, School of Education, University of Wisconsin-Madison. The opinions expressed in this publication are those of the author and do not necessarily reflect the views of the supporting agencies.

BEST COPY AVAILABLE

PROJECT 2. NONINSTRUCTIONAL INFLUENCES ON ADOLESCENT ENGAGEMENT AND ACHIEVEMENT

Principal Investigators: B. Bradford Brown and Laurence Steinberg
Project Coordinator: Susie D. Lamborn
Project Staff: Karen Bogenschneider, Michelle Christiansen, Mary Cider, Bih-Hui Huang, Nancy Kaczmarek, Diane Kohrs, Elizabeth Kraemer, Cary Lazarro, Margaret Mory, Nina Mounts, Mark Philipp, Joy Wiggert

Main Questions

In a spate of studies conducted during the 1970s and 1980s researchers raised concerns over the limited knowledge base and low levels of academic motivation that characterized a sizeable number of American high school students. Most recommendations for dealing with these problems focused on the "instructional" domain of the school: curriculum content, teaching methods, course work or credit requirements, ability grouping, teacher-student ratios, and so on. As important as these factors are to student engagement and achievement, it is obvious to even the most casual observer of high schools that students' interests and efforts in school work are affected by "noninstructional" factors as well. For example, a student whose parents demand that working on the family farm or caring for siblings take precedence over homework and school attendance cannot be expected to do as well as a student whose parents regularly attend school functions and set firm expectations that the student get high grades.

Our study focused on four areas of noninstructional influences on high school students' engagement and achievement patterns: family (especially parents), peers (especially peer group, or "crowd" affiliations), part-time employment, and school-sponsored extracurricular activities. Our interest was to move beyond basic studies of "structural" features in each area that affected student achievement: whether students came from intact or single-parent families, whether students were involved in extracurricular activities or not, and so on. Instead, our intent was to focus on processes of influence in each area: how different parenting strategies affected engagement and achievement, whether extracurricular participants were affected by the degree to which coaches or advisors emphasized academic achievement, and so on. In other words, our main interest was in identifying the specific processes in each area by which students' academic engagement and school performance are increased or diminished. A second interest was in exploring how influences interacted across areas to affect high school students. Should these four noninstructional areas be regarded as independent, competing, or complementary sources of influence on student engagement and achievement?

Our intent was to identify ways in which school personnel could emphasize the positive influences and offset the negative influences that were observed in each noninstructional area. In other words, we wished to identify "school-site levers" by which students could be "pulled" into more academically oriented family and peer environments or directed into extracurricular and part-time employment contexts that would enhance their

engagement in school. This interest was central to our choice of noninstructional areas to study. School staff organize and direct extracurricular activities; they oversee student participation in part-time employment and peer relationships; and they have opportunities to involve parents in school and educate them about effective parenting strategies. Thus, to a surprising extent, schools are able to direct the academic influences that students encounter in each of the noninstructional areas that we studied.

Methodology

To address these issues we developed a self-report survey questionnaire that was administered in two parts (one in the fall and one in the spring) to all students present on the day of testing in three Wisconsin high schools and six in the San Francisco Bay area. Although all were four-year public high schools, they varied substantially in size (from 400 to 2500 students), location (rural, suburban, inner-city), and the ethnic and socioeconomic composition of the student body. Approximately 8,000 of the 12,000 students enrolled in these schools successfully completed both portions of the questionnaire. Refusal rates were very low (under 5 percent) in all schools, but sample attrition (between fall and spring portions of the questionnaire) was disproportionately high among black and Hispanic students and among those with records of low academic achievement.

In all three Wisconsin schools and three of the California schools the questionnaire data were supplemented by interviews with a selected portion of students and parents. The interview data provided more detailed information on family and parental influences and on respondents' location in the school's peer group system.

To allow us to examine age changes as well as age differences in patterns of noninstructional influences we repeated administration of the questionnaires a second and third year in each school. Graduating seniors were not followed past high school, but each year the entering (freshman) class and all other new students were added to the study.

The design and administration of these research instruments was a collaborative effort between our research staff and colleagues at Stanford University who, under the direction of Drs. Sanford Dornbusch and Herbert Leiderman, were conducting a similar investigation of ethnic differences in parental influences on high school student achievement.

We are still in the process of cleaning data from the second and third years of the study and merging them with the first-year data. Thus, the findings presented in this report are based on questionnaire and interview data collected during the first year of the study.

Although we did not attempt to construct a nationally representative sample of high school students, findings indicated that our sample compared quite favorably with previous studies that used similar variables, including national samples. For example, the average GPA in our sample was 2.75; students reported lower grades in math and science than English and social studies. They also indicated they spent about 45 minutes per week on homework in each major subject—or 4 to 5 hours per week all told. These figures are not significantly

different from findings of nationally based studies (Thomas, 1990). The sample also was comparable to previous study samples in the proportion involved in extracurricular activities and part-time jobs, the average hours per week spent in employment, the distribution among parenting styles, the relationship between parenting styles and various psychosocial outcomes, the most prominent peer groups, and many other measures. Because of these comparisons, we feel confident in generalizing our results beyond the schools that participated in the survey.

At the same time, it is important to point out that for most analyses there were substantial differences among participating schools in the pattern of results, even after controlling for the ethnic and socioeconomic distribution of the student body. For example, students in the rural Wisconsin school spent less time on homework (20% below the sample average), had lower educational aspirations and engagement levels, lower GPAs, and lower levels of parental monitoring and parental achievement expectations than students in any other school in the sample. Such findings underscore the limitations of aggregate results from nationally representative samples and the need to examine student engagement and achievement patterns within schools with different profiles (in terms of size, location, etc.). With this in mind, what follows should be considered a general statement of our results rather than a comprehensive report of all that is in our data.

Main Findings

The common practice for studies of noninstructional influences is to examine the effects of a single area of influence without reference to other areas and with little attention paid to factors such as school size or students' ethnicity. We believe there is much to be gained from a more integrated approach to the study of noninstructional influences. Thus, rather than presenting findings about influences in each noninstructional area separately, we will collapse the four areas studied into two pairs and examine the comparative influence of the areas that comprise each pair.

Parental versus peer influences. A common belief is that parents and peers represent opposing influences on adolescents: Whereas parents encourage academic achievement and prosocial behavior, peers distract teenagers from achievement and entice them into antisocial activities (Coleman, 1961; Davis, 1949). Our findings, however, suggest that both parental and peer influences are quite diverse and they tend to be more complementary than oppositional, although the precise nature of the relationship varies among ethnic groups.

As in previous studies, we found that students from economically disadvantaged and single-parent families did worse academically than those from higher socioeconomic backgrounds or intact families. Of more interest, however, was that specific parental attitudes and behaviors had an impact on student achievement levels. Students had higher grade averages if their parents were involved in school (attended school functions, were aware of the classes their child was taking, etc.) and if they monitored students' academic progress (checked to see that homework was done, "kept tabs" on the child's whereabouts after school, and so on). Father's level of involvement in school was more predictive of the child's grades

than mother's level of involvement—in large part because paternal involvement was generally quite limited so that any involvement by fathers was a significant factor. Parental expectations for achievement (the grade average parents expected their child to maintain) also was a significant predictor of achievement level, but not as significant as parental monitoring or parental involvement.

Beyond these academically focused parenting variables, another significant predictor of the child's academic performance was general parenting style. As others have reported, children from authoritative households outperformed (academically) children whose parents adopt authoritarian, indulgent, or neglectful parenting styles. Analyses within ethnic groups (controlling for socioeconomic status), however, indicated that this was true only for Anglos. Among Asians, students from authoritarian families did just as well as those from authoritative families, and parenting style was not strongly predictive of achievement levels among blacks and Hispanics.

In general, then, parents' actions (monitoring, involvement in school, parenting styles) had more impact on student achievement levels than their values or expectations.

As for peer influence, most students reported that their friends encouraged achievement—at least to a moderate degree. In fact, most students indicated that their friends regarded finishing high school as significantly more important than partying or spending time with friends or being involved in extracurricular activities. Of course, there was substantial variation in the degree to which peers endorsed school achievement, especially in regard to the peer group, or "crowd," to which students belonged. Peer support for achievement was exceptionally strong among members of the brain crowd, relatively weak among druggies, and moderate (and relatively undifferentiable) for jocks, populars, loners, and average students.

This suggested that the degree to which students take school seriously can be swayed by the peer crowd into which they fall. Yet, crowd affiliation does not appear to be haphazard or independent of adult influence. We found that the rank ordering of crowds by achievement norms paralleled the rank ordering by parents' marital status (proportion in intact families), parenting style (proportion in authoritarian households), parents' educational expectations, and degree of parent monitoring. It appeared that family structure and parenting behaviors were significant factors directing students into crowds that were more or less academically oriented.

Nevertheless, parents and peers did operate as significant, independent sources of influence on student achievement patterns. Students with the highest grade averages reported strong support for academic achievement from both parents and peers. Yet, the relationship between parental and peer support did vary among ethnic groups. For Anglos and Asians, parents and peers were complementary influences on academic outcomes (they had significant, independent, direct effects). For Hispanics the effects were more synergistic; specifically, parental support enhanced academic outcomes, but primarily among respondents who enjoyed high peer support. For black students, effects were either synergistic or

compensatory (high support from one reference group enhanced academic outcomes for students who encountered low support from the other reference group).

Influences of extracurricular activities and part-time work. The influences of participation in extracurricular activities and part-time jobs are difficult to predict. On the one hand, they may be so engaging or time-consuming or exhausting that students have little inclination, time, or energy to study. On the other, contact with adults, eligibility requirements, or glimpses of future career possibilities may motivate students to work more diligently in school.

In our sample, 40% of students had part-time jobs (during the school year); most worked 15 hours a week or more. More students—over two-thirds of the sample—were involved in at least one school-sponsored extracurricular activity, but their time commitment was much lower than among workers, averaging 10 hours or less per week. Whereas parental and peer influences on achievement tended to be closely related and complement each other, the influences of extracurricular participation and part-time employment were, in many respects, antithetical.

Our findings corroborated the results of previous studies that working per se had less of an influence than number of hours worked. Those who worked less than 10 hours a week enjoyed a modest "academic edge" over students without jobs. As hours worked increased beyond this level, however, both GPA and homework time dropped substantially. Furthermore, hours worked was directly related to rates of school deviance (skipping school, cheating on tests, etc.) and psychosomatic disturbance (anxiety, depression).

By contrast, extracurricular participation was associated with positive school outcomes, even after controlling for background differences (academic ability, SES, etc.) between participants and nonparticipants. The more extensive a student's participation—in terms of number of hours, number of activities, or number of types of activities (sports, performing, leadership, clubs, and interest groups)—the more time was devoted to homework and the higher was the students' GPA. Interestingly, however, the degree of academic advantage that extracurricular participants enjoyed depended on the type of activity in which they were involved. Those who concentrated on "glory" sports (football, basketball, baseball) or performing activities had a significantly lower academic record than those who concentrated on leadership activities or clubs and interest groups. In part, this was due to differences in the "academic climate"—especially the degree of personal resources and support for achievement from fellow participants—that students encountered in their activities. Interestingly, the degree to which coaches or advisors supported achievement was not a significant factor in participants' achievement levels.

In general, then, whereas part-time employment distracted students from achievement, extracurricular activities enhanced their school performance, although in each case the effect was mitigated by additional factors (hours worked, "academic climate" of the activity, etc.). The contrast was especially troublesome because there was a negative correlation between hours of involvement in these two contexts. In other words, students "stole time" from an

academically enhancing environment (extracurricular activities) in order to increase involvement in an academically alienating environment (part-time jobs). As with parental and peer influences, the influences in these two noninstructional areas were significant but modest.

Implications for Practice

It is understandable that many parents feel alienated from high schools. They find themselves unable to comprehend the academic work their children are doing and unable to offer much assistance with homework. They may recall their own academic frustrations and failures in high school. They are unfamiliar or uncomfortable with the "popular culture" (rock groups, grooming styles, teenage vernacular) that dominates the school. These feelings or experiences, combined with their sense of a teenager's need to be independent and make her or his own decisions, may prompt parents to limit their contact with school or their efforts to monitor their child's academic progress. Our findings emphasize the need for high schools to redouble their efforts in parent involvement and parent education. It is revealing, we think, that parents' attendance at extracurricular events is nearly as influential (to their child's achievement patterns) as their attendance at back-to-school nights or other academically oriented meetings. Schools may increase parental involvement through greater empowerment of parent advisory councils or parent-teacher associations, greater reliance upon parent booster clubs for extracurricular activities, wider use of parents as chaperons and sponsors for social events, and so on. In multicultural schools, offering "back-to-school" night classes in Spanish or Asian languages may dramatically increase attendance.

Efforts to bring parents to the school more regularly should be accompanied by efforts to educate parents in effective parenting and discipline strategies, in appropriate methods of monitoring their child's activities, and in productive responses to their child's performance in classes. This may involve meetings to discuss particular topics, brochures that can be mailed to parents, use of local media to impart information, and so on. Parents should be encouraged to "network" with each other to share information on "what works" in motivating teenagers academically and directing them to prosocial activities.

Schools also can take a strong hand in shaping the extracurricular program to enhance students' academic commitments. Although there is a strong effort these days to "toughen" eligibility requirements ("no pass-no play" rules, etc.), our findings suggest that a more productive approach would be to enhance the academic climate of extracurricular activities. It may be time to adopt a new philosophy for school-sponsored activities, especially interscholastic sports, in which coaches and advisors are rewarded for student participation rates rather than the team's won-loss record or the "professional polish" of a dramatic production. Reducing practice time and performance expectations may relieve the pressures students report that interfere with their school work. It should also free coaches and advisors to be more effective academic mentors for participants.

Schools also can play a strong advisory role for students seeking part-time employment. Schools may wish to offer (or require) a counseling session for students seeking

school endorsement of a work permit. The session could caution students about the academic risks of extensive work hours and advise them on time management strategies, decision-making skills, and the like. Schools also ought to forge stronger partnerships with local businesses that employ their students; school personnel can become more sensitive to employers' needs and frustrations while at the same time alerting employers of the academic risks that long hours and inflexible work schedules present to students.

The school's role in shaping peer group influences may be more indirect but is still important. School staff should think carefully about the consequences of differential treatment of members of different peer groups: strictly enforcing school rules for druggies while ignoring infractions by jocks or brains. Devising programs that give alienated groups such as druggies or punks some sense of ownership of the school may help dissipate the anti-intellectual norms that characterize these crowds. Having several staff members cultivate closer relationships with members of these crowds may increase their sense of school bonding. At the same time, staff should make an effort to direct students into more academically oriented crowds. This can involve working directly with at-risk students to cultivate talents and interests that will make them more acceptable to groups such as the jocks or performers or normals. It can also involve working with parents on parenting strategies that will direct students into healthier peer groups.

Implications for Research

In addition to academic engagement and achievement, the findings bear on broader issues of interest in empirical research and theory about adolescent development. Most notably, they provide support for ecological models of development by demonstrating the importance of context in shaping adolescent behavior. For example, we discovered that authoritative parenting, widely accepted as the most effective parenting strategy, actually has markedly different effects in different ethnic contexts. Also, our findings not only contradicted theories that present parents and peers as opposing forces in adolescence but indicated that the precise relationship between parent and peer influences (whether they are complementary, compensatory, or synergistic) depends on background factors such as age and ethnicity. Still to be explored are the substantial variations by school in the patterns of association we observed, variations that remain even after controlling for student body characteristics such as ethnicity or socioeconomic status. In seeking to identify the factors that account for school effects (size, location, school climate, etc.), we may discover linkages between the noninstructional influences that were the focus of our investigation and instructional factors that were the focus of other projects in the Center.

Our study underscores the need to focus on process variables in examining contextual effects on adolescent development and behavior. For example, whether or not students had a part-time job or were involved in extracurricular activities was not as strong a predictor of academic outcomes as factors such as hours spent in these contexts or the degree to which the demands of the work or extracurricular context distracted them from school work. Researchers have already moved from status to process variables in examining parental

influences on adolescent behavior. This approach should be encouraged in other contexts (the work place, the peer group, and so on).

Reference

Thomas, J. W. (1990, November). Expectations and effort: Course demands, students' study practice, and academic achievement. Paper presented at the OERI conference on student motivation, Washington, DC.